

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

WHAT IS CLAIMED IS:

1. A liquid crystal display device, comprising:
 - a pair of substrates;
 - a liquid crystal layer held between the substrates and having a transmissive display region for transmissive display and a reflective display region for reflective display in each of a plurality of dot regions,
 - the liquid crystal layer including a liquid crystal being initially vertically aligned and having negative dielectric anisotropy, and the pair of substrates each having an electrode to drive the liquid crystal arranged on a surface facing the liquid crystal layer,
 - the electrode of at least one of the pair of substrates having a slit opening and/or a protrusion to control the alignment of the liquid crystal in each of the transmissive display region and the reflective display region, the slit opening being arranged through a part of the electrode, and the protrusion being arranged on the electrode and including a dielectric,
 - the opening area of the slit opening and/or the occupying area of the dielectric protrusion in a plane direction of the substrate being set larger in the reflective display region than in the transmissive display region.
2. The liquid crystal display device according to claim 1, the distance between the electrodes arranged on the pair of substrates being substantially equal in the transmissive display region and the reflective display region.
3. The liquid crystal display device according to claim 1, the dielectric protrusion being arranged on the electrode and having an inclined surface inclining at a predetermined angle to the electrode surface.
4. The liquid crystal display device according to claim 1, the distance between adjacent two of the openings and/or protrusions arranged in the reflective display region being smaller than the distance between adjacent two of the openings and/or protrusions arranged in the transmissive display region.
5. The liquid crystal display device according to claim 1, the openings and/or the protrusions having a configuration to control the tilt direction of the vertically aligned liquid crystal molecules depending on change in electric field.
6. The liquid crystal display device according to claim 1, further comprising:
 - an upper substrate and a lower substrate as the pair of substrates, the lower substrate having a backlight for transmissive display arranged on an opposite side to the liquid crystal layer and having a reflective film on a side facing the liquid crystal layer, the reflective layer being selectively arranged only in the reflective display regions.

7. The liquid crystal display device according to claim 6, further comprising:
a color filter layer on a side of the upper substrate facing the liquid crystal layer or on a side of the reflective layer facing the liquid crystal layer.
8. Electronic equipment, comprising:
the liquid crystal display device according to claim 1.